

# WallBox eVolve Smart

*Our ultimate design for a WallBox with communications*



## Application

Designed to be installed in both public access environments (urban spaces, shopping centres, parking lots, airports, petrol stations ...) and private ones (companies, community car park sites...) where their intelligent capabilities offer a range of possibilities which improve the user and/or operator experience.

## Concept Design

Nowadays, the concept of smart cities demands an innovative design for its urban equipment, especially for EVSE (EV Supply Equipment) due to its innovative aspect. With its stylised shape and modern lines, eVolve series meets this demand.

In the same way, not only external design has been taken into account but also the daily conditions (both operational and environmental) EVSE have to withstand.

## Product highlights

### For Charge Point Operator / Owner

- The **Embedded Load Management** allows a lower TCO (Total Cost of Ownership) by charging two EVs simultaneously even when the charger is not supplied with its maximum output power
- Its **frontal key-locked door** provides an easy access to the inside of the charger which results in a lower OpEx (Operating Expenditure) due to a quicker installation and service (preventive/corrective). Moreover, it allows the charger to be installed next to a wall, optimising the available space
- About the charger's **housing**, aluminium and ABS plastic have been combined in a robust structural design that provides protection to both mechanical stress and severe environmental conditions, increasing the charger lifespan and avoiding its replacement in just a few years
- In terms of **communication**, either by its Ethernet port (by default) or 3G/GPRS modem (optional) the charger can be connected to a back-office system (by means of OCPP) obtaining benefits such as user management, billing, remote error diagnostic, etc.
- To comply with the most demanding requirements regarding billing, eVolve series includes **MID certified meters**

### For Charge Point User

- Clear charging instructions and plug status are shown using a **backlight display**, increasing user satisfaction, especially useful when the charger has been previously reserved by another user
- eVolve series offers a **flexible authentication**, meaning that the user can either authenticate before or after connecting the cable to the EV. Additionally, the authentication process can also be disabled for a 'plug & charge' use mode
- The **Accessibility for the disabled** has also been considered, complying with international standards regarding the height of connectors/ display that facilitates its operation
- eVolve series includes the necessary **electrical protections** (optional) not only to minimize the human safety risk of electrical shock but also to ensure the maximum uptime due to independent protections per connector

# WallBox eVolve Smart Series

## General Specifications

<b>Network connection</b>	10/100BaseTX (TCP-IP)
<b>Interface protocol</b>	OCPP1.2, 1.5
<b>Enclosure rating</b>	IP54 / IK10
<b>Enclosure material</b>	Aluminium & ABS
<b>Enclosure door lock</b>	Key lock
<b>Enclosure access</b>	Frontal door
<b>Operating temperature</b>	-5 °C to + 45 °C
<b>Ambient temperature storage</b>	-40 °C to + 60 °C
<b>Operating humidity</b>	5 % to 95 % Non-condensing
<b>Light beacon</b>	RGB colour indicator
<b>Display</b>	LCD Multi-language
<b>Power limit control</b>	Mode 3 PWM control according ISO/IEC 61851-1
<b>Dimensions (D x W x H)</b>	Small: 450x290x600 mm Large: 450x290x850 mm
<b>Weight</b>	Small: 25 kg Large: 30 kg

Small: Model S & T without electrical protection.  
Large: Model S & T with electrical protection and Model TM4.

<b>RFID Reader</b>	ISO / IEC14443A / B MIFARE Classic/DESFire EV1 ISO 18092 / ECMA-340 NFC 13.56MHz
<b>Meter</b>	MID Class 1 - EN50470-3
<b>Power output management</b>	Embedded Load Management
<b>Type 2 Socket Protection</b>	Locking System
<b>Optional devices</b>	
<b>Low temperature kit</b>	-30 °C to +45 °C
<b>Electrical protection Type A*</b>	Overcurrent: MCB (curve C) Safety: RCD Type A (30mA)
<b>Electrical protection Type B*</b>	Overcurrent: MCB (curve C) Safety: RCD Type B (30mA)
<b>Surge protection</b>	Four pole transient surge protector IEC 61643-1 (class II)
<b>Type 2 Charging Socket</b>	Shutter
<b>Wireless Communication</b>	3G / GPRS / GSM

\*Not available in model TM4

## Models Specifications

Model	S	T	TM4	
<b>AC power supply</b>	1P + N + PE	3P + N + PE	3P + N + PE	
<b>AC input voltage</b>	230 VAC +/-10%	400 VAC +/-10%	400 VAC +/-10%	
<b>Maximum input current</b>	64 A	64 A	64 A	
<b>Maximum input power</b>	14,7 kW	44 kW	44 kW	
<b>Number of plugs</b>	2	2	4	
<b>Outlet A</b>	<b>Maximum output current</b>	32 A	32 A	16 A
	<b>Maximum output power</b>	7,4 kW	22 kW	3,7 kW
	<b>AC output voltage</b>	230 VAC (1P + N + PE)	400 VAC (3P + N + PE)	400 VAC (3P + N + PE)
<b>Outlet B</b>	<b>Maximum output current</b>	32 A	32 A	16 A
	<b>Maximum output power</b>	7,4 kW	22 kW	3,7 kW
	<b>AC output voltage</b>	230 VAC (1P + N + PE)	400 VAC (3P + N + PE)	400 VAC (3P + N + PE)
<b>Socket type</b>	2x Type 2 Socket (lock system)	2x Type 2 Socket (lock system)	2x Type 2 Socket (lock system)	2x CEE/7

